

What is the distance between the following lines?

ex:

$$x = 10$$

$$x = 24$$

$$d = \frac{|24 - 10|}{1} = 14$$

ex:

$$y = -5$$

$$y = 16$$

$$d = 21$$

$$d = \frac{|-5 - 16|}{1} = 21$$

ex:

$$x = -3$$

$$x = 12$$

$$d = 15$$

Ch 3 Review

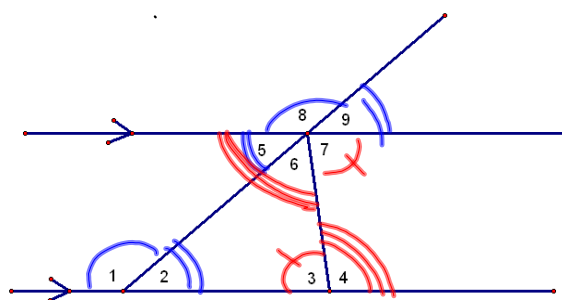
3.1

- Parallel lines
- Skew lines
- Parallel planes
- Types of angles

3.2

- If \parallel , then

- corresponding angles are \cong
- alternate int. angles are \cong
- alternate ext. angles are \cong
- s-side (cons.) int. angles are suppl.
- Algebra questions (challenging)
- Proof



3.3

- Slope

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

- vertical lines

no slope eqn: $x = 5$

- horizontal lines

 $m = 0$ eqn: $y = 4$

- parallel lines

same slope

- perpendicular lines

slopes are opposite reciprocals

3.4

- Equations of lines

$$y = mx + b$$

3.5

- If corresponding angles are \cong ,

- If alternate int. angles are \cong ,

- If alternate ext. angles are \cong ,

- If s-side (cons.) int. angles are suppl.,

- then the lines are ||.

- Algebra questions (challenging)

- Proof

- Which lines are parallel?

3.6

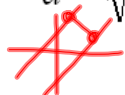
- Perpendiculars and distance

- between horizontal lines

- between vertical lines

- use the distance formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$



p167-170

#s 1-25, 30, 32, 34-40

p784 #16